

### **Remarks**

The above claim amendments are submitted with the following remarks to be fully responsive to the Final Official Action dated September 9, 2005. Accordingly, this response is timely filed within the shortened-statutory period commencing from such mailing date as extended by the one month request for extension of time filed herewith. Should any additional fees be required, the Commissioner is authorized to charge Kagan Binder Deposit Account No. 50-1775 and thereafter notify us of the same. Reconsideration of all outstanding grounds of the rejection and allowance of the subject application are believed in order and respectfully requested.

In the Official Action the Examiner indicated allowable subject matter in claims 10-15. Accordingly, independent claims 1 and 17 are currently amended to substantially recite the subject matter of dependent claim 13. In this regard, it is respectfully submitted that a specific range for the value of  $b$  in the presently claimed  $Al_bGa_{1-b}N$  heterojunction region is not necessary for patentability. As presently amended, claims 1 and 17, as well as the dependent claims thereof, are believed patentable over the prior art of record.

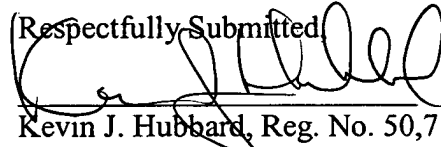
Independent claim 24 is cancelled and the subject matter of independent claim 24 is now recited in new dependent claim 31. New claim 32 is added and substantially recites dependent claim 10, intervening claim 9, and base claim 1 in independent form. As noted above with respect to claims 1 and 17, a specific range for the value of  $b$  in the presently claimed  $Al_bGa_{1-b}N$  heterojunction region of new claim 10 is not believed necessary for patentability.

The amendments to the pending claims are believed to be consistent with the Examiner's indication of allowable subject matter in claims 10-15. Claims 1-23, 25, 26, and 28-32 are thus believed in a condition for allowance, which allowance is earnestly solicited.

The Examiner is invited to contact the undersigned, at the Examiner's convenience, should the Examiner have any questions regarding this communication or the present patent application.

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By:

Respectfully Submitted  
  
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